

**ASSESSMENT MISSION OF MAP/IDEALS MEDICAL TEAM - EAST JERUSALEM AND GAZA
9 - 14 AUGUST 2014**



SUMMARY

Background

In mid July, shortly after the escalation of hostilities in Gaza, Medical Aid for Palestinians (MAP), working with IDEALS, started developing a plan to send medical specialists to Gaza. The plan, developed in consultation with the Ministry of Health (MoH) in Gaza, was for specialists to go out once there was a stable ceasefire to help carry out post-traumatic, reconstructive surgery on the many, very complex injuries. The MoH identified the specialities that they considered would be required.

An initial team was assembled to carry out an assessment of needs and any immediate surgical work if required. All had been to Gaza many times previously. This team comprised:

Mr John Beavis – consultant orthopaedic surgeon (retired)

Sir Terence English – consultant cardio-thoracic surgeon (retired)

Mr Graeme Groom – consultant orthopaedic surgeon, Kings College Hospital

Ms Sarah Phillips – consultant orthopaedic consultant, Kings College Hospital

Dr Andrew Ferguson – specialist in public health

Mr Tony Laurance – CEO, MAP

On 7th August, DFID decided to support and expand this initiative by immediately deploying a team of NHS doctors to provide support to the Gaza hospitals. UKIETR and Save the Children (with whom DFID had pre-existing agreements) were tasked to work with MAP to implement the plan. Following discussions between the parties, it was agreed that the MAP/IDEALS team would deploy on Saturday 9 August with a UKIETR team following a day or two later.

Terms of Reference

The ToR for the mission was to assess the need for specialised medical assistance from the UK to assist in treating some of the most severe casualties; to develop a plan for providing that assistance having regard to security and other constraints; to provide immediate surgical assistance if and when required; and to assess if there were patients who would benefit from transfer to the UK for treatment.

Summary of Activities

The MAP/IDEALS team arrived at Tel Aviv airport at 0530 on 10 August. Three members of the group who already had permits to enter Gaza departed straight for Erez and entered Gaza the same day, after some delay, although a ceasefire had not yet been agreed. The other three members departed for East Jerusalem.

In East Jerusalem, the team visited St Joseph's and Al Makassed hospitals – the main Palestinian (NGO) referral hospitals receiving casualties transferred from Gaza. They spoke to the Director and senior clinicians, viewed the facilities and reviewed some of the patients on the wards. They also met with DFID and FCO and with the UKIETR team leaders when they arrived on Monday afternoon 11 August.

Early on Tuesday 12 August, the three team members departed for Gaza to join their other colleagues having obtained their permits.

In Gaza, visits were made to all three of the main MoH hospitals: Al Shifa in Gaza City and the European and Nasser hospitals in Khan Younis. The team reviewed the basic records (and in some cases the patients themselves) of all those injured patients who were still surgical in-patients and spoke at length to the Directors and clinicians. Meetings and discussions were also held with the Deputy Minister of Health and senior officials in the MoH and with many other organisations working in the health sector including UNWRA, WHO, ICRC. The orthopaedic consultants had planned to assist with at least one operation at the European hospital but this operation was cancelled at the last moment.

The full team left Gaza at noon on Thursday 14 August, met the UKIETR team at the airport to brief them and flew back to London that evening.

Main Conclusions of the Assessment

A full report on the assessment visit, covering both the secondary care and public health issues, is attached as an annex. The main findings are as follows:

1. The Emergency departments of the major hospitals coped extremely well with the huge numbers of casualties and the initial surgical care provided within Gaza was of a high standard. Nonetheless these departments were the weak points during the crisis as a result of: limited space and poor design; ineffective triage of patients, with persistent mixing of major and minor cases; the limited development of emergency medicine as a specialty, with senior doctors often rotating to the emergency department from their chosen specialty for a short time and services largely provided by junior doctors. The emergency departments were also overwhelmed by the sheer number of relatives/friends who accompanied injured patients and by reporters/television crews

2. At the time of our visit, the emergency surgery caseload (orthopaedic, plastic, general, neuro, vascular and maxillofacial) was largely under control. If there is a further escalation of hostilities resulting in a significant number of new casualties, that may of course change.

3. Of the 9,986 patients injured, approx 1000 have complex injuries which require further, reconstructive surgery. Of these:

- about 450 patients have been transferred to hospitals outside Gaza (East Jerusalem, West Bank, Egypt, Jordan and elsewhere) to access further treatment as well as to reduce the caseload in Gaza hospitals to a more manageable level;
- approximately another 140 patients were awaiting transfer which was expected to happen in the next few days;
- between 350 and 400 patients were prematurely discharged from hospitals in Gaza following surgery to free up beds. Although limited records were kept the MoH was inviting these patients to return to the hospital for a more comprehensive assessment: the findings, vital for the planning of further surgical interventions and longer-term rehabilitation, will hopefully be available by the 17 August

4. The receiving hospitals in East Jerusalem confirmed that:

- They had significant capacity to accept further transfers if needed.

- There was no need for external specialist surgical support, but they were concerned about resistant wound infections and requested help from an appropriate microbiologist and/or infectious disease specialist.

5. The main need of the hospitals in Gaza for assistance in dealing with the current caseload is longer term support with reconstructive surgery (almost exclusively bone and soft tissue reconstructive surgery requiring specialist trauma/orthopaedic and plastics experience). Patients requiring this specialist care will come from three groups:

1. Those patients still in hospital in Gaza (see above)
2. Those patients who ultimately return from hospitals outside Gaza - the number requiring further reconstructive surgery is currently unknown
3. The 350-400 patients prematurely discharged from hospital (see above) – again the number requiring further reconstructive surgery will not be known until the MoH assessment findings are available.

6. The MoH had received offers from a number of countries, including the UK, to take severely injured patients. A significant number were transferred to Turkey during our visit. The MoH stated that there were no patients needing to be transferred to the UK at the present time. We were also informed that some patients referred to Egypt received sub-standard care in small hospitals ill-equipped to deal with the severity of their injuries.

7. There are very significant public health risks because of the large numbers of displaced people, most living in very crowded shelters, the extensive damage to homes and infrastructure, especially power, water and sanitation, and acute water shortages. These risks are mitigated by a number of protective factors including high immunisation rates, the pro-active efforts of UN agencies and Ministries and a relatively well – educated population well used to coping with adversity. Nonetheless, serious risks of outbreaks of disease remain and will need to be very closely monitored.

Main Recommendations

1. *Maintain the register of appropriately qualified senior surgeons and anaesthetists prepared to deploy to Gaza at short notice, in case of a further escalation in the conflict. However, this will only be useful if the UKJIETR or employing agency allows them to be deployed in such circumstances*
2. *Plan for a small team of UK specialists with trauma/orthopaedic and plastics reconstructive surgical experience (with their anaesthetic colleagues if possible) to make monthly visits to Gaza over the next three months, to work alongside local colleagues, managing complex pre-selected cases and building capacity within Gaza itself.*

3. *Procure key items from the MoH approved list of urgently required hospital equipment. However, further coordination is required to validate and prioritise these requirements, and to avoid duplication with other donors/aid agencies. Where possible equipment should be procured locally to ensure compatibility with existing systems and repair/maintenance capacity.*
4. *Arrange for appropriate specialists to conduct a more detailed assessment of the Emergency Department capacity at Shifa hospital, Gaza city, and the European Gaza hospital, Khan Younis. The assessment, with the full support of the MoH, would aim to produce a set of recommendations for developing the departments and the specialty for both the short and longer term.*
5. *Arrange for appropriate specialist(s) to conduct a more detailed assessment of the needs of the burns/plastics unit at Shifa hospital with reference to the management of critically injured patients and those that require free flaps and, with the support of the MoH, produce recommendations for developing this aspect of the unit's work*
6. *Encourage the FCO to put pressure on Israel and Egypt to reduce the delays being experienced in the transfer of some seriously ill patients at the Erez and Rafah crossings.*

MAP/IDEALS
18 August 2014



**ASSESSMENT MISSION OF MAP/IDEALS MEDICAL TEAM - EAST JERUSALEM AND GAZA
9 - 14 AUGUST 2014**

REPORT

General Information

Gaza consists of five provinces and a population of 1.8 million, of whom 75% are refugees. The population is concentrated in seven towns, 10 villages and eight camps, with a total area of only 360 sq. km.

On 7th July 2014 the Israeli army launched a large military operation in the Gaza Strip, codenamed “Protective Edge”, with the stated objective of stopping Palestinian rocket firing at southern Israel and destroying the military infrastructure of Hamas and other armed groups.

This development marked the collapse of the Egyptian-brokered ceasefire understanding reached between Israel and Hamas in November 2012, which had been gradually undermined since December 2013. The latest escalation started in early June following the formation of the Unity Government to which Israel was strongly opposed., Tensions increased following the abduction and killing of three Israeli youths in the southern West Bank, on 12th June. The Israeli government alleged Hamas were responsible and a massive search and arrest operation was conducted by the IDF in the West Bank. Hamas responded by launching rockets from Gaza at southern Israel and there was an intensification of Israeli airstrikes. Overall, in the period leading up to the start of the current operation, a total of 15 Palestinians were killed and another 58 injured as a result of Israeli airstrikes in the Gaza Strip; seven Israelis were injured due to rocket fire.

The current crisis comes against a backdrop of heightened vulnerability and instability. Much of the economic deterioration in recent years is due to the military blockade and resulting isolation of the population. However, recent restrictions imposed by the government of Egypt, including the limited functioning of Rafah crossing and the almost total closure of the illegal tunnels under the border with Gaza, have further damaged the already fragile humanitarian situation. Since the start of the second Intifada in 2000 the income per capita has declined sharply, and the labour force unemployment rate has climbed to over 30%. This has resulted in a substantial increase in the number of families falling below the poverty line, reflected by the fact that 75% of the population now receive food assistance.

Additionally former de facto government employees, including the security forces and 60% of the Ministry of Health (MoH) workforce, have not been paid salaries regularly since August 2013 and no salaries at all since April 2014. Delivery of basic services has also been undermined due to an ongoing energy crisis, involving power outages of 12 hours per day.

Following the expiration of the temporary ceasefire at 0800 on 9th August hostilities resumed, albeit at a lower level than before the ceasefire, and a further 72 hour ceasefire was declared from midnight on 10th August. The status of the negotiations over a more permanent settlement mediated by Egypt remain uncertain.

Already a total of 230 schools have sustained some level of damage, including 25 schools destroyed or damaged beyond repair. The Ministry of Education and Higher Education (MoEHE) has announced that the new academic year will not start on 24th August as scheduled: the explosive remnants of war (ERW) clearance, damage assessment and repair work will certainly take longer than two weeks.



Population Data

The entire population (1.8 million people) of the Gaza Strip has been affected by the conflict.

1,962 Palestinians have been killed, including at least 1,417 civilians, of whom 459 are children and 238 are women.

9,986 Palestinians have been injured, including 3,009 children and 359 elderly.

238,000 people are residing in UN Relief Works Agency (UNRWA) and government emergency shelters. A further 110,000 internally displaced persons (IDPs) are registered as taking shelter with host families, with the actual figure likely to be much higher.



Health Services

Background

Health care in Gaza is delivered by four main providers: the government; UNRWA; non-governmental organisations (NGOs: local and international); and the private sector.

In spite of significant financial and operational constraints the Palestinian health sector has shown great resilience over the years. Unfortunately the development of health services largely ended with the take-over by Hamas, following which all Western donors withdrew investment and development support and attention shifted to humanitarian assistance and crisis management. This situation has been compounded by the ongoing conflict and related surge in traumatic injuries/damage to infrastructure. The blockade and loss of the smuggling tunnels has further disrupted the supply chain of essential medicines and medical disposables, exacerbating chronic shortages due to budgetary restrictions.

A brain drain, professional isolation and high attrition rate have contributed to a general lack of appropriately qualified/experienced clinical staff within the health sector and added extra burden to the remaining staff.

Primary health care (PHC) is provided by government, NGO and UNRWA managed centres, staffed by a variable mix of doctors, nurses, female health workers, pharmacists, dentists and laboratory technicians.

The vaccination programme is well established in Gaza, delivered by a combination of UNRWA (70%) and MoH (30%) facilities. Coverage is excellent at over 95% for all pre-school age components of the national schedule in 2013.

Of the 27 hospitals in Gaza 13 are managed by the MoH (with a total of 1,500 beds), with the private sector and NGOs managing the remainder (with a total of nearly 500 beds). Most of the hospitals are small, specialist units, with only three MoH facilities having the capacity to manage major trauma: Shifa hospital, in Gaza city, and the Nasser and European Gaza hospitals in Khan Younis.

Traumatic injuries generally account for 35-50% of all emergency admissions to these hospitals. The most common cause of serious injury or death is the ongoing conflict, followed by road traffic accidents and social violence.

Distribution of hospital beds and primary health care centres in Gaza, by health care provider

Province of GS	Population	Hospital Beds					Primary Health Care Centres			
		MoH	UNRWA	NGO	Private	Total	MoH	NGO	UNRWA	Total
Gaza North	254,093	58	0	62	0	120	10	8	3	21
Gaza City	470,605	788	0	231	39	1,058	14	19	4	37
Mid. Area	193,648	97	0	0	0	97	16	10	5	31
Khan Younis	259,640	496	0	166	0	662	12	6	2	20
Rafah	159,250	52	0	0	0	52	4	8	4	16
TOTAL	1,337,236	1,491	0	459	39	1,989	56	51	18	125

Services for Disabled People

In theory the Ministry of Social Affairs (MoSA) has the lead responsibility for ensuring an integrated package of care for persons with disability (PWD) and their families in Gaza. However, despite the presence of very favourable legislation, implementation is poor.

In terms of rehabilitation there are no specialist services provided by the government or UNRWA: services are found only in the NGO and private sectors. However, UNRWA has provided the buildings and limited core funding for NGO-led Community Based Rehabilitation (CBR) centres in each of the refugee camps. The focus of these centres varies from camp to camp, but in general services include day care activities (providing some educational and leisure opportunities for disabled and non-disabled persons), information sharing, liaison with other rehabilitation agencies and advocacy campaigns. Rehabilitation services are not available within the existing network of primary health care centres.

Training institutes for rehabilitation workers (physicians, physiotherapists, occupational therapists and psychologists) do exist within Gaza, but the courses provide little practical experience for trainees.

Prosthetic and orthotic devices are almost exclusively provided by the Artificial Limbs and Polio Centre in Gaza city. Other patients do leave Gaza and receive devices overseas, but this has created huge problems in terms of poor education/assessment, a complete lack of follow-up upon return to Gaza and the use of devices that cannot be maintained, repaired or replaced with compatible parts within Gaza. This centre is receiving technical and financial support from both the International Committee of the Red Cross (ICRC) and Handicap International, and additional financial support from Islamic Relief. Funding for each device comes from a bewildering mix of donor, NGO, UNRWA and private sources, but there are strange anomalies within the system: for example, whereas UNRWA will provide 50% of the cost of prosthesis for a refugee

injured during the conflict, they will not contribute to the cost of an orthosis for a child with cerebral palsy. The workshop does not manufacture devices, but assembles imported Otto Bock component parts. In addition to the technicians there are physiotherapists, who work mainly with amputees on stump preparation and gait training. ICRC have been working to improve the quality of the service provided (particularly with the prosthetic and orthotic technicians who have received very little formal training other than brief internships with commercial companies) and introduce a true multidisciplinary approach to the assessment and management of patients within the centre.

Many NGOs are registered with the MoSA as providing rehabilitation services for PWD in Gaza. In reality, very few provide a sustained, credible level of service. The absolute lack of service provision for PWD and their families is further compounded by the extremely limited coordination and integration of available services: leading to greater inequity in terms of accessing those services.

Current Situation

It is important to understand that a detailed MoH assessment of the damage sustained by hospitals and PHC centres is currently taking place, as is a World Health Organisation (WHO) led cross-organisational rapid health needs assessment, the results of which will be available in another ten days (providing the ceasefire holds). This information will supplement and update this report.

PHC

Despite the destruction of some facilities and damage to others, the majority of MoH, UNRWA and NGO run PHC centres are operational and providing a full range of services.

Despite initial disruption the vaccination programme already seems to have recovered and the previously very high coverage rates will quickly be restored. Centrally the “cold chain” has been unaffected, with supply of the peripheral vaccination centres currently taking place on a weekly rather than the usual monthly basis. The main limiting factor peripherally has been the lack of fuel (kerosene) for the generators. The generators themselves are old, unreliable, and are being over-used because of the lack of network electricity.

ICRC and a number of other agencies are working with the MoH to resupply urgently required drugs (for the management of acute and chronic diseases) and consumables.

Pre-hospital emergency care

Early in the conflict Palestinian Red Crescent Society (PRCS – responsible for transporting injured/acutely unwell patients to hospital) and MoH (responsible for inter-hospital transfers) ambulances appeared to be targeted by Israeli forces resulting in the deaths of 21 paramedics/ambulance drivers and the loss of 30 ambulances. This

happened despite close liaison between ICRC (on behalf of PRCS) and Israeli authorities, and even when PRCS ambulances were accompanied by ICRC vehicles. Unfortunately this resulted in an understandable reluctance on the part of PRCS staff to enter the high risk areas to attend casualties, leaving family and friends to transport the patient by any other means available to them.

Hospitals

The Deputy Minister of Health and several senior clinicians all identified the Emergency Departments of the major hospitals as weak points during the crisis. Many of the problems have previously been raised during our involvement over the past five years: limited space and poor design of these departments; ineffective triage of patients, with persistent mixing of major and minor cases; the limited development of Emergency Medicine as a specialty, with senior doctors often rotating to the Emergency Department from their chosen specialty for a short time and services largely provided by very junior doctors. The Emergency Departments were also overwhelmed by the sheer number of relatives/friends who accompanied injured patients and by reporters/television crews.

Shifa hospital:

- Thankfully undamaged and all services fully functional
- When the conflict started, supplies were already low – thus, within the first 24hrs the hospital started to run out of some essential supplies, including sterile gloves, fluids (especially normal saline and colloids) and antibiotics
- The blood bank coped remarkably well in terms of blood and fresh frozen plasma, but there was a shortage of platelets
- Radiology and laboratory services also coped remarkably well, although the lack of a CT scanner in the Emergency Department and the unreliability of the existing CT scanner limited the immediate assessment of some major trauma victims
- Orthopaedic interventions were, and still are, limited by a lack of: orthopaedic beds; external fixators; skin traction; vac pumps; opsite; power tools; medical screws; intramedullary locking nails; SI screws; and possibly an image intensifier
- The anaesthetic teams managed the workload despite a general lack of: isoflurane; induction agents (propafol and etomidate); muscle relaxants; laryngeal masks; and central lines (adult and paediatric)
- The intensive care unit (ICU) has a usual capacity of 11 beds, but during the conflict they increased capacity to 30 beds by using a mixture of orthopaedic, burns unit, cardiac and general medical beds – the main ICU was largely used to resuscitate patients during the busiest times
- The burns/plastics unit was overloaded, particularly when faced with multiple critically injured patients – the director has not felt confident to undertake microsurgery or free flaps, despite possessing a microscope and having received some previous training – the most obvious equipment lack was again vac pumps

- Concerns were raised about infection control procedures on the surgical wards: the proximity of the beds; the general overcrowding with relatives and other visitors milling around; complex wound care/dressing changes taking place on contaminated linen (and without appropriate analgesia/anaesthesia); and a lack of hand cleaning facilities/practice
- Sterilisation capacity (both autoclaves and gas sterilisation) was certainly stretched, but the only real problem was a lack of washing machines for gowns/towels etc
- The mortuary has capacity for 18 bodies, but at one stage 70 bodies were stored there and the refrigeration system failed repeatedly – fortunately families identified and removed the bodies of their loved ones very quickly

European Gaza hospital:

The hospital is well appointed and organised, and access was provided to all areas, the Director and all available heads of surgical departments.

- It has all major surgical specialties apart from plastics
- They indicated that 970 war wounded were seen, 450 admitted and 197 died
- All immediate treatment was undertaken at the hospital, with many subsequently transferred
- The consistent message was that medical staffing was generally adequate, but that reinforcements would be welcome during war and the immediate aftermath
- A further consistent theme was that visiting teams, particularly in neurosurgery, plastic/reconstructive surgery, retinal surgery, upper GI (eg hepatobiliary), would be welcome on a regular basis for training as well as treatment
- Equipment was in short supply before the war, because of the blockade, and shortages of essentials rapidly became severe and limiting and have not yet been replaced
- Each department was clear about its needs of which lists were available
- The hospital remained viable during the conflict because of the transfer policy

It was impossible to conduct a similar assessment at Nasser hospital in the time available. However, the orthopaedic equipment requirements were the same at all three hospitals.

We have a MoH approved list of emergency equipment urgently required by all the major hospitals in Gaza (Appendix 1).

Rehabilitation Services

El Wafa hospital, the only specialist rehabilitation hospital in the whole of the Gaza Strip, has been completely destroyed. This will place significant further strain on the already limited rehabilitation services described above, with the loss of both the hospital based

services and the community outreach programme supported by El Wafa. We were told a that alternative premises for the hospital have already been identified but it will need to be fully equipped – all the equipment in Al Wafa was also destroyed

This part of the assessment is incomplete (see below).

Recommendations:

Immediate:

- 1. Ensure a supply of fuel (kerosene) for the peripheral vaccination centres.*
- 2. Procure key items from the MoH approved list of urgently required hospital equipment – however, further coordination is required to validate and prioritise these requirements, and to avoid duplication with other donors/aid agencies – where possible equipment should be procured locally to ensure compatibility with existing systems and repair/maintenance capacity.*
- 3. Feed this assessment into the WHO led rapid health needs assessment that will be completed over the coming days, and ensure that the latter incorporates a detailed assessment of the hospital and community based rehabilitation services available to PWD.*
- 4. Arrange for appropriate specialists to conduct a more detailed assessment of the Emergency Department capacity at Shifa hospital, Gaza city, and the European Gaza hospital, Khan Younis. The assessment, with the full support of the MoH, would ideally produce a set of recommendations for developing the departments and the specialty.*
- 5. Arrange for appropriate specialist(s) to conduct a more detailed assessment of the needs of the burns/plastics unit at Shifa hospital with reference to the management of critically injured patients and those that require free flaps and, with the support of the MoH, produce recommendations for developing this aspect of the unit's work.*

Longer-term:

- 1. Consider procuring solar powered generators for the peripheral vaccination centres – up to 50 to cover both UNRWA and MoH facilities.*
- 2. Use our own information and that arising from the WHO led rapid health needs assessment to consider how best to link hospital services to the NGO led community based rehabilitation services for PWD.*
- 3. Collaborate with the MoH to implement the recommendations from 4 and 5 above.*

Key Health Indicators

Of the 9,986 patients injured to date Shifa hospital in Gaza city has received the most (about 3,500), followed by Nasser and European Gaza hospitals in Khan Younis and then smaller hospitals around the Strip (primarily Kamal Odwan in the north). At Shifa hospital about 900 of the injured patients were admitted, with the vast majority requiring some form of emergency surgery.

The MoH has already transferred about 450 patients to hospitals outside Gaza (East Jerusalem, West Bank, Egypt, Jordan and elsewhere) to access further treatment as well as to reduce the caseload in Gaza hospitals to a more manageable level. There are approximately another 140 patients awaiting transfer. Patient choice has been a major factor in selecting patients for transfer outside Gaza, with less focus on the clinical need. Early feedback from those patients transferred to Egypt suggests unacceptable delays at Rafah crossing, a generally poor quality of care and extremely unhygienic hospital conditions, leading some to demand an early return to Gaza.

The receiving hospitals in East Jerusalem confirmed the following:

- The initial surgical care provided within Gaza was of a high standard.
- Although the transfer documentation was sometimes scanty the majority of the transfers themselves were appropriate.
- They had already provided secondary surgical care, and plans were in place for the onwards referral, further rehabilitation or repatriation of patients.
- They had significant capacity to accept further transfers if needed.
- There was no need for external specialist surgical support, but they were concerned about resistant wound infections and requested help from an appropriate microbiologist and/or infectious disease specialist.

In addition, between 350 and 400 patients were prematurely discharged from hospitals in Gaza following surgery to free up beds. Although limited records were kept the MoH is now inviting these patients to return to the hospital where they received treatment for a more comprehensive assessment: the findings, vital for the planning of further surgical interventions and longer-term rehabilitation, will hopefully be available by early next week.

Finally, we reviewed the basic records (and in some cases the patients themselves) of all those injured patients at the three main hospitals who were still surgical in-patients:

Shifa:

<i>Neurosurgery</i>	<i>11 patients – 1 child still requiring cervical spinal fixation</i>
<i>General surgery/vascular</i>	<i>17 patients – 1 requiring secondary surgery</i>
<i>Orthopaedics</i>	<i>19 patients – 9 requiring secondary surgery</i>
<i>Burns/plastic surgery</i>	<i>33 patients – 12 requiring skin grafts/flaps</i>
<i>Total</i>	<i>80 patients</i>

A very similar picture emerged for the 28 patients identified at Nasser hospital and the six patients at European Gaza hospital.

At the present time, unless there is a further escalation of hostilities resulting in a significant number of new casualties, the emergency surgery caseload (orthopaedic, plastics, general surgery, neurosurgery, vascular and maxillofacial surgery) is largely under control. However, what senior surgeons at Shifa hospital and elsewhere in Gaza would greatly appreciate is longer term support with the second phase of reconstructive surgery (almost exclusively bone and soft tissue reconstructive surgery requiring specialist trauma/orthopaedic and plastics experience): one option would be for a small team of such specialists from the UK to plan regular, short (one to two weeks) visits to Gaza to work alongside local colleagues, managing complex pre-selected cases and truly building capacity within Gaza itself. Whilst surgeons in Gaza receive pressure from such patients, and their families, to transfer their care overseas, it is anticipated that this alternative option would be welcomed. Those patients requiring this specialist care will come from three groups:

7. Those patients still in hospital in Gaza (see above)
8. Those patients who ultimately return from hospitals outside Gaza - the number requiring further reconstructive surgery is currently unknown
9. The 350-400 patients prematurely discharged from hospital (see above) – again the number requiring further reconstructive surgery will not be known until the MoH assessment findings are available

At a community level there has been an increase in reported cases of viral meningitis and watery diarrhoea: greater than the expected seasonal increase but certainly not at critical levels yet. There has also been a significant increase in reported cases of impetigo, scabies and lice. However, given the terrible overcrowding at both UNRWA and government shelters (with 60 people occupying a single small room and extremely limited water/sanitation facilities) and in homes hosting IDPs, the anticipated public health emergency has not yet materialised. This is probably due to a number of protective factors: the very high vaccination coverage rate; good hygiene practices at a community level despite the crisis; very low pre-crisis levels of acute protein energy malnutrition; an effective pre-crisis reporting and outbreak investigation system, involving the MoH, UNRWA and WHO, which has been appropriately modified during the crisis; and the incredible efforts of relief agencies to supply water, food, hygiene kits and non-food item (NFI) kits to IDPs.

According to the Protection cluster, some 373,000 children require direct and specialized psychosocial support (PSS) – although others contest this, arguing that most recover naturally and that unqualified PSS can do harm. Children are showing symptoms of increasing distress, including bed wetting, clinging to parents and nightmares. Child protection and PSS is urgently required to address issues of child abuse, exploitation and violence inside shelters.

Protection Cluster members continue monitoring and investigating incidents to identify possible violations of international law, as well as consolidating information on civilian fatalities. The Protection Cluster consolidated inputs from partners on the “UNRWA Guidance to Basic Protection Issues in Shelters” in order to address ongoing protection concerns and to mainstream the needs of priority groups including women, children, persons with disabilities, the elderly and persons with injuries. A number of children’s PSS initiatives, delivered by the MoSA, UN Children’s Fund (UNICEF), UNRWA and both local and international NGOs, have already begun in the shelters, but:

1. The number of social workers and PSS counsellors at hospitals is insufficient to meet current needs.
2. Displaced children and their families hosted with community members remain largely unreached by child protection interventions.

The reproductive and maternal health situation in Gaza remains critical. The UN Population Fund (UNFPA) estimates that nearly 46,000 women in Gaza are pregnant, with 10,000 of them displaced. The MoH reports that about 160 deliveries take place each day. Women are giving birth under increasingly difficult circumstances. Maternity clinics have been closed, as are a number of private maternity centres, and other facilities are overstrained. In some maternity clinics, beds have been used to treat the wounded. Shifa hospital has reported a 15-20% increase in premature births. Unattended home deliveries are reportedly on the rise, increasing the risks for women and their babies.

Recommendations:

Immediate:

1. *Maintain the register of appropriately qualified senior surgeons and anaesthetists prepared to deploy to Gaza at short notice, in case of a further escalation in the conflict.*
2. *Plan for a small team of UK specialists with trauma/orthopaedic and plastics reconstructive surgical experience (with their anaesthetic colleagues if possible) to make monthly visits to Gaza over the next three months, to work alongside local colleagues, managing complex pre-selected cases and building capacity within Gaza itself. (Note: planning for this is already in hand)*

Longer-term:

1. *Over the next three months plan and secure additional funding for a one to two year extension of 2 above.*
2. *Plan and secure funding for an expansion of this capacity building approach to other key specialties identified by the MoH.*
3. *Work with the MoH and other key stakeholders to review and improve patient transfer procedures.*

Water, Sanitation and Hygiene (WASH)/Power

The last ceasefire facilitated the repair and resumption of essential infrastructure. Although the Gaza Power Plant (GPP) remains inoperable following an Israeli airstrike on 29th July, eight of the 10 electricity feeder lines from Israel to Gaza are now working. Efforts to repair the remaining two lines, which require extensive repairs, will begin again during the current ceasefire. Despite the repairs, only a limited proportion of the electricity received is utilised due to extensive damage sustained by the internal distribution network, with the result that electricity is still only available in cycles of six hours followed by 12 hours of outage. Those localities that sustained the greatest damage remain without electricity entirely. Ten generators donated by Israel to the Palestinian Energy and Natural Resources Authority (PENRA) will be deployed to various facilities, including water pumping stations.

The strike on the GPP also had a devastating impact on water and sanitation facilities throughout Gaza. Technical teams from the Coastal Municipalities Water Utility (CMWU) have been deployed at full capacity to repair and operate previously inaccessible facilities. The water supply to half of the population has been restored, providing those households with water for several hours every five days.

Efforts by UNRWA and WASH Cluster members have led to the provision of 15 litres water per day for IDPs in shelters, including three litres for drinking as per international standards. Many agencies have been distributing hygiene kits to IDPs, particularly those in shelters.

The monitoring of water quality will become an increasingly important issue as people return to their homes with contaminated water supplies and disrupted sanitation systems. The municipalities monitor the quality of water intermittently using the Public Health Laboratory, and UNRWA have their own system whereby they monitor chlorine levels within camp water supplies on a daily basis, the microbiological quality of the water in each camp monthly, and the chemical quality of the water in each camp every six months. Capacity is limited, as is the range of chemicals tested.

Needs:

1. There is an urgent need for drinking water and water for domestic use as well as access for sanitation and hygiene articles for hosted IDPs.
2. Fuel is urgently needed to operate critical WASH facilities.
3. Damaged electricity feeder lines, water and waste water lines need urgent repairs. Lack of energy to operate facilities and limitations on access hinder the critical operations of WASH facilities, including operations of water service providers as well as maintenance and repairs, with potential devastating consequences for the entire population of the Gaza Strip.

4. The constant movement of IDPs between their homes and designated shelters during ceasefires poses challenges in prioritizing responses undertaken by WASH service providers.

Recommendations:

Immediate:

1. *Consider further significant investment in hygiene kits, targeting those IDPs sheltering with host families and those returning to damaged homes. However, further coordination is required to validate this requirement and to avoid duplication with other donors/aid agencies.*
2. *Conduct a more detailed assessment of the specific requirements and consider investing in an upgrade of the water quality monitoring systems at UNRWA and the Public Health Laboratory.*

Food

The World Food Programme (WFP), in cooperation with UNRWA, is providing ready-to-eat emergency food rations to all IDPs sheltered in UNRWA or government schools on a daily basis. WFP also continues to provide food assistance to IDPs hosted with relatives and to hospital patients and staff. Food Security Sector (FSS) partners are delivering complementary food distributions to IDPs at UNRWA and government shelters. WFP is distributing bread from West Bank bakeries to meet the mounting food needs. FSS partners have also been distributing food, from 10th August onwards, to everyone not normally receiving core food assistance, primarily to assist people whose houses have been partially or fully destroyed and/or those hosting IDPs. The ongoing electricity shortage has heavily impacted commercial activities, the milling capacity and the performance of bakeries. Supply chains in Gaza are already stretched and therefore aid agencies are being encouraged to bring in food aid items from West Bank/outside Gaza Strip.

Needs:

1. IDPs are still in need of emergency food assistance. Nutritious food commodities rich in vitamins and minerals should be provided in a more consistent manner to IDPs, in particular for children under five, pregnant and lactating women, and elderly people.
2. The 100,000 people who will not be able to go back to their homes will need food and other assistance for a longer term.
3. Additional bread production capacity is required due to lack of electricity in households.
4. Animal feed for 4,000 breeders/herders should be provided in order to avoid further loss of livestock and additional erosion of livelihood of herder's communities.
5. Humanitarian access to allow for provision of food and other emergency assistance to the civilian population should continue.

Housing/Shelter/NFI

16,735 homes have been destroyed or damaged beyond repair, rendering some 100,410 people homeless.

There are a further 33,800 whose homes have sustained significant damage but are still habitable, and another 200,900 whose homes have sustained minor damage.

209,172 people are being provided with shelter in 87 designated UNRWA schools across the Gaza Strip and 28,869 individuals are residing in 23 government shelters (including seven supported by UNRWA). These figures have fallen during this ceasefire as some IDPs return to assess the damage to their homes and see what can be salvaged.

Needs:

1. The 16,735 families whose homes were totally destroyed or heavily damaged by either air strikes or tank shelling are in need of emergency NFI kits. In the medium term, they will also need cash assistance of over US\$67 million to cover rental fees and urgent expenses.
2. Emergency shelter repair interventions are needed for the 33,800 individuals whose homes were damaged but are still inhabitable.
3. The 200,900 individuals whose homes sustained minor damage need basic NFI assistance.
4. IDPs with hosting families (at least 110,000 individuals) are considered to be particularly vulnerable and in need of NFIs and food items.
5. The total reconstruction and repair costs of residential structures are estimated at US\$455 million.

Recommendations:

Immediate:

1. *Consider significant investment in emergency NFI kits, targeting those families whose homes have been destroyed or badly damaged - however, further coordination is required to validate this requirement and to avoid duplication with other donors/aid agencies.*

Security Situation

The existence of thousands of ERW (explosive remnants of war) in civilian areas is a major concern, especially for children, farmers, displaced persons returning home and humanitarian workers. Areas up to three kilometres from Gaza's perimeter fence (44% of the Gaza Strip), which were declared as a "buffer zone" for the duration of the Israeli ground incursion, are considered particularly dangerous. The UN Mine Action Service (UNMAS) has already received donor support for a mine risk education (MRE) project to reduce the risk posed to civilians by ERW, prioritising returnees (especially children) in key areas, and clearance of ERW has begun in some areas.

The first fatalities and injuries from ERW were sadly reported on 13th August.

Relevant Strategic Plans/Funding

2014 Gaza Crisis Appeal (UN): intended to address urgent needs in Gaza currently requests US\$367 million to implement 86 projects in clusters/sectors including Education, Food Security, Health and Nutrition, Protection, Shelter and WASH as well as Coordination and Support Services.

Emergency Response Fund (ERF): an additional mechanism available to fund interventions in Gaza through rapid and flexible support to affected civilian populations – 10 project proposals have already been approved (total US\$2.3 million), including MAP's project to provide emergency support to neonatal units in Gaza hospitals by procurement of essential drugs and disposables.

These funding mechanisms will be further informed by the findings of the UN coordinated rapid humanitarian needs assessment (including the WHO led health component), which will be completed over the coming weeks.

Prior to this conflict the UN Office for the Coordination of Humanitarian Affairs (UNOCHA) had already included the following objective as a priority in the Common Humanitarian Action Plan for the Occupied Palestinian Territories: *To strengthen the capacity of health providers and communities to respond to emergencies*. Current events simply make this an even greater priority.

Access/Logistics

Crossings

Erez: Open for movement with prior coordination according to normal operation hours
– national staff working for international NGOs are not currently authorised

Beit Hanoun (Arba-Arba): Operations reactivated

Kerem Shalom: Open as per normal operation hours

Rafah: Open

Since the establishment of the Logistic Coordination Cluster, 15 trucks transporting relief items on behalf of the humanitarian community have been facilitated by the Cluster and arrived in Gaza City. Items transported include urgent aid relief such as water, bread, toilet paper, cooking oil, rice, hygiene kits, mattresses and pillows. However, the almost exclusive reliance on Kerem Shalom as a goods entry point into the Gaza Strip remains a key constraint currently limiting access to the region. Safe and secure transportation inside the Gaza Strip also remains an ongoing constraint limiting the ability of the delivery of urgently required relief supplies. The increasing needs and deteriorating situation is forcing the humanitarian community to augment its supply lines, increasing pressure on Kerem Shalom and at the same time raising issues of prioritisation of cargo.

Needs:

1. Safe and secure transportation inside the Gaza Strip is urgently required to ensure the delivery of much needed relief supplies and to guarantee transporters are able to continue working.
2. The hostilities in the Gaza Strip have been impeding an effective distribution plan of relief commodities; both access to existing warehouses and supply of labour forces has been hindered. There is an urgent need to ensure coordination with relevant authorities and organisations operating in the Gaza Strip and coordinate proper humanitarian space to ensure safe passage, delivery and distribution of aid cargo.

Other Agencies and their Activities

Where relevant other agencies and their work have been documented in this report. However, a comprehensive account of the rapidly changing situation, the key stakeholders in each sector and their activities can be found in the daily UNOCHA situation reports (www.ochaopt.org).

Availability of Support/Cooperation

The most important collaboration is the long-standing relationship between IDEALS and MAP-UK. The professionalism and integrity of both teams has resulted in effective, productive working relationships with all key stakeholders in Gaza, and this partnership must and will be maintained.

We have had an excellent relationship with the MoH for the past five years, largely facilitated by Dr Nasser Abu Shaban (Director General, Human Resources Development Directorate, based at Shifa hospital), and Dr Yousif Abu El Reesh (previously Director General, Hospitals, and now Deputy Minister of Health). On this visit we have expanded our network to include Dr Mohamed Alkashif (Director General, International Cooperation Department), Dr Abdul Latif (Director General, Hospitals) and Dr Fouad Issawi (Director General, PHC). It is, however, extremely important to understand the limitations within which the Deputy Minister and his team are working: there is no effective system of coordination between ministries in Gaza at the present time; there is no regular or effective communication between the Deputy Minister and the Minister in Ramallah; and, as well as the ongoing problem that 60% of his staff are not receiving a salary, he is also having to negotiate continually with Ramallah regarding the payment of invoices for core service requirements such as fuel, consumables and patient food.

A strong working relationship exists with the WHO, through Dr Mahmoud Daher (Head of the Gaza Office) and Dr Wendy Venter (Public Health Officer). We have promised to share this report with them, so it can be fed into the planned, comprehensive WHO-led health needs assessment, and regular contact with their team must be maintained.

A formal link has also been established with ICRC who, as well as supporting the Artificial Limbs and Polio Centre, have provided emergency and reconstructive surgical support to the MoH during the current and previous conflicts. We must continue to coordinate our efforts with them to improve the quality and coverage of such services and avoid duplication.

IDEALS/MAP
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